Faculty Use of Service-Learning: Perceptions, Motivations, and Impediments for the Human Sciences

Madhumita Banerjee
St. Cloud State University

Cheryl O. Hausafus
Iowa State University

This study examines characteristics of human sciences/Family and Consumer Sciences (FCS) faculty who do and do not incorporate service-learning in their teaching, examines their perceptions about service-learning as an effective teaching strategy, and identifies the factors that motivate and deter use of service-learning. Survey results from 368 human sciences/FCS faculty members in institutions of higher education across the United States perceive service-learning to be an effective tool for learning and teaching within the human sciences.

According to Giles and Eyler (1998), identifying ways service-learning can enhance subject matter learning is the first of their top ten unanswered questions in service-learning research. Zlotkowski (2000) recommended careful consideration be given to service-learning's relationship to individual disciplinary/interdisciplinary areas. Historically, state Campus Compacts have provided discipline-specific service-learning workshops. National Campus Compact has also encouraged development of proposals to enhance service-learning in the disciplines.

Unfortunately, in spite of such initiatives, there has been little investigation on service-learning's discipline-specific efficacy. Research on general disciplinary differences spans a range of issues (Braxton & Hargens, 1996). Braxton (1995), Braxton and Hargens, and Neumann, Parry, and Becher (2002) analyzed studies on a variety of topics and identified implications for how a discipline influences teaching, paying particular attention to differences between hard and soft dimensions. Biglan (1973a, b) clustered higher education disciplines according to their subject matter characteristics as hard or soft, pure or applied, and with a living or non-living object focus. According to Zlotkowski (2000), "disciplinary areas operate within a discourse community and the privileged discourse of each discipline not only determines what most members of that discipline are prepared to take seriously, but also carries epistemological and methodological implications that structure their work" (p.62). To improve subject matter learning, it is time to engage in dialogue concerning service-learning's fit and efficacy within individual disciplines.

The present study investigates characteristics of collegiate faculty in the soft, applied, life-based field of human sciences who do and do not incorporate service-learning in their teaching. The terms "human sciences" and "family and consumer sciences" (FCS) are used interchangeably in this paper. Family and consumer sciences is a multidisciplinary field comprising areas related to child development, family studies, resource management, housing, apparel and textiles, and food and nutrition, to name a few. It centers around the relationship between humans and their natural, social, and created environments and uses a holistic approach to help people solve problems and enhance their potential within their near environments—family, home, and community. Family and consumer scientists promote the well-being of individuals, families, and communities through education, prevention, and empowerment. The discipline has a tradition of service and civic engagement.

This study examines faculty perceptions about service-learning and factors that motivate/deter faculty to incorporate service-learning in teaching. Weigert (1998) queried that given the formidable challenges presented by service-learning, why should faculty take on the hard work of incorporating service-learning in courses? Although service-learning enables faculty to integrate academic goals with their own desire to "make a difference" in communities or to work toward social change (Driscoll, 2000), it is imperative that scholars in administrative and other decision-making levels acknowledge faculty's efforts.

Past studies looked at faculty motivation and deterrents in various disciplines such as the humanities, physical, biological, and health sciences (Abes, Jackson, & Jones, 2002; Hammond, 1994; McKay & Rozee, 2004). Both Hammond's and

McKay and Rozee's study reported curricular outcomes, such as bringing greater relevance to course material, encouraging self-directed learning, and providing an effective form of experiential education, to be the strongest motivators for implementing service-learning. Student learning outcomes provided the strongest motivation for utilizing service-learning in Abes et al.'s study. The study reported a lack of logistical support as the primary deterrent for service-learning use. Non service-learning faculty were deterred by issues concerning time, logistics, and a lack of compelling evidence that service-learning will increase student learning.

Although scholars within the human sciences have periodically advocated the need for embracing service-learning, there are no known studies that examined faculty's perceptions about service-learning's fit and effectiveness in this field.

There have been numerous studies that explored the effects of service-learning on students (Astin & Sax, 1998; Eyler & Giles, 1999; Eyler, Giles, & Braxton, 1997, Stanton, Giles, & Cruz, 1999). Most of these studies have delved into the impact of service-learning on such qualities as personal efficacy, interpersonal skills, stereotyping, and civic engagement. A diverse group of faculty from various hard and soft disciplines reported student benefits such as exploring career possibilities, assessing personal values and beliefs, dispelling stereotypes, and establishing links between theory and reality as positive outcomes of service-learning pedagogy (McKay & Rozee, 2004). Although there is an abundance of studies looking at service-learning's beneficial outcomes on students, there is a paucity of research in the area of faculty's perceptions about service-learning.

Cantor (1995) reported that faculty value active and experiential learning opportunities that improve students' critical thinking and problem solving skills, promote self-direction, and involve students in the learning process. Discovering faculty motivations and deterrents within individual disciplines can yield insights for attracting faculty to service-learning. Additionally, this could initiate new areas of research, enriching our understanding of many issues currently receiving attention from scholars interested in service-learning's contribution to discipline-specific learning.

Research Questions

The major research questions for this study are: (1) What are the professional and demographic characteristics of human sciences faculty who do and do not incorporate service-learning in their courses? (2) What are human sciences faculty members' perceptions of service-learning as a value-added teaching practice in the field of human sciences? (3) What are the factors that motivate and deter human sciences faculty in implementing service-learning? (4) What are the factors that deter human sciences faculty not using service-learning in their courses?

Methodology

Design, Sample, and Data Collection

The study used a cross-sectional survey research design to investigate the above research questions. The lead author's institutional human subjects review board approved the study. The population consisted of all human sciences teaching faculty in higher education institutions in the United States. The sampling frame or target population consisted of all human sciences teaching faculty in higher education institutions that had an FCS teacher education program listed in the National Directory of the Family and Consumer Sciences Division of the Association for Career and Technical Education (2003-2004). Data were collected by sending an electronic survey (e-survey) via email to a list of teaching faculty chosen randomly in the institutions listed in the national directory. Random sampling ensured the sample exhibited similar characteristics of the population so that inferences could be generalized. For descriptive research, the general guideline for sample size is 10-20% of the population (Gay, 1996). Taking into account that faculty response rates to e-surveys ranged between 20-30% (Bosnjak & Tuten, 2001), invitations to participate were sent to 1662 faculty members, to obtain a sample size of at least 300. Procedures outlined by Web survey experts to increase response rates, such as providing incentives for completion of survey, were employed.

An introductory email was sent to a randomly chosen sample of human sciences/FCS faculty members informing them they had been selected to participate in the study. A brief overview of the intended research was provided along with a note detailing significance of the study. Participants were asked to notify if they were not holding a teaching responsibility at the current time. Based on responses, faculty members who held non-teaching positions were removed from the sample list. After removing non-teaching faculty as well as undeliverable email messages, the final sample consisted of 1440 respondents. Three hundred and sixty-eight responses were recorded, yielding a response rate of 26%, consistent with previous Web survey response rates.

Instrumentation

The instrument consisted of three surveys. The professional and demographic characteristics survey contained nine questions pertaining to faculty's

(1) teaching content area, (2) rank, (3) tenure status, (4) number of years in college teaching, (5) major professional responsibilities held (teaching, research, advising, and service), (6) number of service-learning courses taught, (7) age, (8) gender, and (9) race. The instrument was pilot tested by a faculty panel and revised based on their feedback.

The second survey gauged faculty perceptions about service-learning's value-added as a teaching strategy in human sciences courses. It consisted of 25 items, 19 of which represented a single construct: perception about whether service-learning could be used as an effective pedagogy in the human sciences. The remaining 6 items were designed specifically to avoid response set bias. They did not measure perception about the precise construct under investigation. They were general statements about service-learning, such as "it is relatively easy to evaluate student's performance in service-learning."

Items were developed after consulting several books and articles on service-learning. Of particular importance was Eyler, Giles, & Schmiede's (1996) *A practitioner's guide to reflection in service-learning: Student voices and reflections*. Items emphasized faculty perceptions about how service-learning can help learners understand critical problems facing society, aid in instilling responsibility, and help in empowering students, all critical goals of FCS education. A panel of FCS faculty, who had implemented service-learning in their courses, analyzed the items to determine content validity, making sure that the items were consistent with the theoretical underpinnings of service-learning pedagogy. The resulting measure was pilot tested with 38 human sciences faculty at a large Midwestern university. Based on their feedback, several items were fine-tuned and wording of other items was modified. Due to a low response rate, factor analysis was not feasible with the pilot data. Respondents were asked to rate their perception on a scale of 1 to 7 with 1 = strongly disagree, 2 = moderately disagree, 3 = slightly disagree, 4 = uncertain, 5 = slightly agree, 6 = moderately agree, and 7 = strongly agree. A mean score on the 19 items greater than 4.50 represented the perception that service-learning was a value-added teaching strategy in FCS. A mean score on the 19 items less than 3.50 represented the perception that service-learning was not a useful practice in the human sciences. Factor analysis of the 25-item scale with 375 survey respondents yielded positive results. Principal components analysis with Kaiser normalization yielded two factors accounting for 56% of the variance in the respondents' scores. All 19 items measuring faculty's perception loaded on one factor. The factor loadings ranged from .89 to .65. The remaining 6 items, included to avoid response set bias, loaded on a second factor with loadings between .68 to .45. These items did not measure faculty's perception about service-learning being a value-added teaching practice within the human sciences. Cronbach's alpha for the entire 25-item measure was .91. Without the extraneous items, Cronbach's alpha was .96. The results of these analyses provide strong evidence for the reliability and validity of the faculty perception scale used in this study.

The third survey, used to determine human science faculty's motivation and deterrents to incorporate service-learning in their teaching, was a shorter version of the Abes, Jackson, and Jones (2002) survey. The survey contained both closed- and open-ended questions with a definition of service-learning provided. Using the definition of service-learning as a guideline, respondents were asked if they currently or have ever taught a course that included a service-learning component. Based on their response (yes or no), respondents were categorized into service-learning or non service-learning faculty, and directed to two different sets of questions designed specifically for each respective group. Service-learning faculty were defined as those answering "yes" to the question "do you currently teach or have you ever taught a course that included a service-learning component?" Fifty-nine percent of the sample (n = 216) answered affirmatively to the above question and were labeled service-learning faculty. Forty-one percent (n = 152) indicated they did not and were designated non service-learning faculty. The term 'family and consumer sciences' was used in the survey questionnaire instead of 'human sciences.'

Results and Discussion

Professional and Demographic Characteristics of Human Sciences Faculty

Data from the first survey instrument were used to answer research question 1: *What are the professional and demographic characteristics of human sciences/FCS faculty who do and do not incorporate service-learning in their courses* (see Table 1)? More than one quarter of the faculty (27.3%) respondents belonged to the content area of human development. Food science and human nutrition faculty constituted the next largest group of almost 17% with faculty in family studies being the third largest (14%). For the purposes of further analysis, housing and interior design faculty were combined with consumer resource management, fashion merchandising was combined with apparel and textiles, and faculty in the "other" category—comprised of counseling and program evaluation—were com-

Table 1
Professional and Demographic Characteristics of Human Sciences/FCS Faculty

Personal Characteristics	Total		Service-Learning Faculty		Non Service-Learning Faculty	
Teaching Content Area	***N* = 373**	**%**	***n* = 216**	**%**	***n* = 149**	**%**
Apparel & Textiles	25	6.7	11	5.1	14	9.4
Human Development	102	27.3	65	30.1	34	22.8
Consumer Resource Management	27	7.2	13	6.0	13	8.7
FCS Education	45	12.1	27	12.5	17	11.4
Family Studies	51	13.7	33	15.3	16	10.7
Fashion Merchandising	24	6.4	11	5.1	13	8.7
Food Science & Human Nutrition	63	16.9	37	17.1	26	17.4
Food Services Production & Hospitality Management	17	4.6	8	3.7	9	6.0
Housing	6	1.6	4	1.9	2	1.3
Interior Design	10	2.7	4	1.9	5	3.4
Other	35	9.3	3	1.4	-	-
Rank	***N* = 372**	**%**	***n* = 215**	**%**	***n* = 150**	**%**
Full Professor	75	20.2	47	21.9	24	16.0
Associate Professor	108	29.0	59	27.4	48	32.0
Assistant Professor	124	33.3	71	33.0	53	35.3
Lecturer	20	5.4	12	5.6	7	4.7
Instructor	45	12.1	26	12.1	18	12.0
Tenure Status	***N* = 372**	**%**	***n* = 215**	**%**	***n* = 149**	**%**
Tenured	190	51.1	113	52.6	71	47.7
On Tenure Track	107	28.8	56	26.0	51	34.2
Not Tenured	75	20.2	46	21.4	27	18.1
Years of College Teaching	***N* = 371**	**%**	***n* = 214**	**%**	***n* = 149**	**%**
1-5	96	25.9	49	22.9	46	30.9
6 -10	74	19.9	43	20.1	30	20.1
11-20	94	25.3	62	29.0	30	20.1
21-30	79	21.3	44	20.6	33	22.1
31-50	28	7.5	16	7.5	10	6.7
# of Service-Learning Courses Taught	***N* = 372**	**%**	***n* = 216**	**%**	***n***	**%**
1-2	139	37.4	139	64.4	-	-
3-5	52	14.0	52	24.1	-	-
More than 5	25	6.7	25	11.6	-	-
None	156	41.9	-	-	-	-
Major Professional Responsibility	***N* = 369**	**%**	***n* = 215**	**%**	***n* = 146**	**%**
Teaching	293	79.4	178	82.8	108	74.0
Research	61	6.5	32	14.9	28	19.2
Service	13	3.5	3	1.4	10	6.8
Advising	2	.5	2	.9	-	-
Age	***N* = 368**	**%**	***n* = 203**	**%**	***n* = 147**	**%**
25-30	16	4.3	11	5.1	5	3.4
31-40	67	18.2	29	13.6	38	5.9
41-50	100	27.2	65	30.4	33	22.4
51-60	144	39.1	85	39.7	56	38.1
61-70	38	10.3	23	10.7	13	8.8
Above 70	3	.8	1	.5	2	1.4
Gender	***N* = 370**	**%**	***n* = 216**	**%**	***n* = 146**	**%**
Female	313	84.6	189	87.5	116	79.5
Male	57	15.4	27	12.5	30	20.5
Race	***N* = 359**	**%**	***n* = 213**	**%**	***n* = 146**	**%**
African American	6	1.6	3	1.4	3	2.1
American Indian/Alaskan Native	5	1.3	4	1.9	1	.6
Asian/Pacific Islander	8	2.1	4	1.9	4	2.7
Caucasian	339	90.4	195	91.6	136	93.1
Hispanic	7	1.9	5	2.3	2	1.4
Other	2	.5	2	.9	-	-

Table 2
Mean Perception and t-test Scores about Service-Learning

Group	*n*	Minimum	Maximum	*M*	*SD*	*t*	*p*
Service-Learning Faculty	213	4.22	7.00	6.32	.61	7.4	.000
Non Service-Learning Faculty	146	2.50	7.00	5.73	.81		
Total Sample	362	2.50	7.00	6.08	.75		

Note. Scores based on 1 = Strongly Disagree and 7 = Strongly Agree

bined with FCS Education. This consolidation permitted content comparisons due to a limited number of cases in these groups. About a third (33%) of the faculty in the total sample were assistant professors with another 30% associate professors. The same percentages were reflected in the service-learning and non service-learning group. About half of the faculty in the total sample as well as in the service-learning group were tenured and another quarter were on tenure track. Robertson and Bean (1998), when studying FCS faculty members' job satisfaction in land grant universities, reported that 67% held the rank of either assistant or associate professor, and 60% were tenured, consistent with this study.

The majority of the sample (74% and over), both in the service-learning as well as the non service-learning group, identified their main professional responsibility as teaching. For the purposes of further analysis, faculty, whose major professional responsibility was research, service, or advising, were combined. This consolidation permitted comparisons between groups, due to a limited number of cases in these groups. Consistent with earlier findings (Bean & Robertson, 1997; Sullivan & Redick, 1991), 40% of the respondents in the total sample as well as in the two groups belonged to the age group of 51-60 years. Another 40% belonged to the combined age group of 31-50 years. In a study of 128 service-learning and non service-learning faculty members in institutions of higher education in the United States, Patel (2004) found that service-learning educators were predominantly White caucasian (86%), and evenly divided by gender (48% females and 49% males). However, as is evident from Table 1, an overwhelming number of FCS faculty were White caucasian (90%) and women (over 80%).

Perception About Service-Learning As A Value-Added Teaching Strategy

The faculty perception survey instrument answered research question 2: *What are human sciences faculty members' perceptions of service-learning as a value-added teaching practice for learning and teaching in the field of human sciences?* This survey required faculty members to describe their perception about service-learning by answering questions using a Likert scale with "strongly agree" (7) through "strongly disagree" (1). Mean perception scores of service-learning faculty were higher than non service-learning faculty. The mean score for the entire sample was 6.08, reflecting that human sciences faculty members perceive service-learning as a value-added teaching strategy in human sciences, whether or not they incorporated it in their courses. An independent samples t-test was performed to examine if service-learning faculty had higher mean perception scores than the non service-learning faculty (see Table 2). The results indicated that service-learning faculty scored significantly higher than non service-learning faculty in their mean perception scores ($t = 7.4$, and $p = .000$). An ANOVA indicated no significant differences within characteristics of faculty on perception scores. Findings from this study echo previous findings in that faculty strongly perceive service-learning helping students understand critical problems facing society, instilling a sense of responsibility, and empowering them.

Motivators and Deterrents for Service-learning Faculty

This section reports the results of a series of inquiries on the sources of motivation, encouragement, and obstacles faced by FCS faculty in implementing service-learning. The modified Abes et al. (2002) instrument gathered data on research question 3: *What are the factors that motivate human sciences faculty in implementing service-learning?* Service-learning faculty, i.e., those who taught at least one course that included a service-learning component ($n = 216$, 59%), were asked *to identify those who encouraged them to use service-learning and the importance of each source of encouragement.* Respondents most frequently received encouragement from the department chairperson (67.6%), with almost 62% receiving encouragement from another faculty member in the department. Service-learning faculty were asked to rate the level of importance of the above mentioned sources of encouragement on a Likert scale ranging from "not important" (1) to "very important" (4). Mean scores for importance of encouragement

Table 3
Sources of Encouragement and Level of Importance (service-learning faculty)

Sources of Encouragement	%	Level of Importance
President / Senior Academic Officer	52.5	2.54
College Dean	54.5	2.61
Department Chairperson	67.6	2.90
Another faculty in the department	61.7	2.98
Faculty in another department	51.7	2.57
A community member	49.3	2.98
Students	39.7	2.98

Note. Level of Importance: 1 = Not important and 4 = Very important

showed fellow faculty members, students, community members, and department chairpersons to be the most important sources of encouragement in the decision to use service-learning (mean of 2.9 and above) (see Table 3).

Unlike Abes et al.'s (2002) study, where faculty reported receiving most encouragement from another faculty in the department, respondents in this study received the greatest encouragement from their department chairperson (68%), followed by another faculty member in their department (62%) and college dean (55%).

Service-learning faculty were asked *to indicate forms of instructional support they received and the level of helpfulness of each* (see Table 4). A four-point Likert scale ranging from "not helpful" (1) to "very helpful" (4) was used. Advice from colleagues (69%) and help from professional organizations/conferences (63%) were reported to be sources of instructional support. Professional journals and presentations were next (58%), followed by faculty development activities within an institution (50%). Although "other" sources were cited less frequently, their level of helpfulness was most prominent (M = 3.56), and included community action members, local community centers, resources in the service-learning campus office, online resources, and books. Advice from colleagues (M = 3.22) and mentoring (M = 3.11) were reported to be relevant in service-learning teaching and instruction (see Table 4).

Stanton (1994) reported the utility of a week-long Campus Compact faculty seminar resulting in successful development of service-learning courses. Opportunity to share and exchange ideas was cited as a direct benefit of participating in course development workshops (McKay & Rozee, 2004). Consistent with Abes et al.'s (2002) findings, advice from colleagues and aid from professional organizations/conferences were reported to be of substantial help in using service-learning. Initiatives such as a faculty fellows program (Harwood et al., 2005) in college/department/discipline level may encourage and sustain faculty efforts with service-learning. Publication of successful service-learning endeavors in diverse subject matter areas will serve the dual purpose of responding to interested faculty seeking instruction as well as providing legitimate examples to not-so-convinced faculty across all disciplines.

Service-learning faculty indicated the importance of the potential for positive outcomes in their decision to incorporate service-learning in their teaching. Using a four-point Likert scale ranging from "not important" (1) to "very important" (4), the mean for student learning outcomes was 3.71, compared to 3.02 for community-based outcomes. Service-learning faculty then were asked to choose no more than three outcomes from a list of 15 that were most important in their decision to use ser-

Table 4
Sources of Instructional Support and Helpfulness (service-learning faculty)

Sources of Instructional Support	% Responding	Level of Helpfulness
Advice from colleagues	69.8	3.22
Professional organizations /conference	63.1	2.91
Professional journals / presentations	58.3	2.91
Faculty development at your institution	50.5	2.93
Mentoring	32.7	3.11
Other	28.6	3.56
Faculty teaching handbook	18.7	2.69

Note. Helpfulness: 1 = Not helpful and 4 = Very helpful

Table 5
Most Influential Service-Learning Outcomes (service-learning faculty)

Service-Learning Outcomes	% Responding
Increases student understanding of course material	58.8
Increases student personal development	48.6
Creates university-community partnerships	39.8
Increases student understanding of social problems as systemic	38.9
Increases student appreciation	37.9

vice-learning. Space also was provided for respondents to include outcomes not identified on the list. The list related to student learning outcomes (7 items), community outcomes (5 items), and professional responsibilities (3 items). On the average, student learning outcomes were selected most frequently as motivators (mean frequency = 78.4), followed by community outcomes (45.4) and professional responsibilities (24.6). In particular, the five items that most strongly motivated service-learning use (selected by at least 25% of the respondents) were "increases student understanding of course material" (58.8%), "increases student personal development" (48.6%), "creates university-community partnerships" (39.8%), "increases student understanding of social problems as systemic" (38.9%), and "increases student appreciation of diversity" (37.9%) (see Table 5).

In the space provided to include additional motivating outcomes, survey respondents cited application of textbook knowledge outside the classroom, making connection from research/theory to practice, teaching values, and changing attitudes as other factors motivating them to include service-learning in their teaching. One survey participant said "it demonstrates people's needs to our relatively sheltered students and makes the FCS curriculum seem vastly more important to them."

The findings indicate that student learning outcomes were most important in faculty's decision to use service-learning, which was consistent with past findings. Hammond (1994) reported curricular motivators as most influential in faculty's use of service-learning. A large majority of the faculty members in Hesser's (1995) study believed that service-learning "extensively" or "very extensively" contributed to conceptual and course content learning outcomes. The results are consistent with past findings as the strongest outcomes that influenced FCS faculty to use service-learning were student understanding of course material and personal development in the process of rendering service. To a lesser extent, service-learning faculty were also motivated by building university-community partnerships. Academic-community partnerships can gain access to more sustainable relationships if civic needs are connected to faculty teaching and research (Bloomgarden & O'Meara, 2007). The study reported several orientations toward integrating teaching, research, and community partnerships. In the face of increasing demands on faculty time, building community-based teaching and research into the traditional teaching and research roles puts forward a formidable challenge. In spite of such challenges, faculty in this study were found to be motivated by university-community partnerships.

To determine how best to sustain faculty use of service-learning, service-learning faculty were asked to *indicate the likelihood that they would continue to incorporate this teaching strategy in their teaching*. Using a five-point Likert scale, ranging from "very likely" (1) to "very unlikely" (5), the mean for all respondents was 1.36, indicating they were very likely to use service-learning in their teaching again in the future. An analysis of variance (ANOVA) was performed to see if there were any differences between faculty members in their likelihood to continue using service-learning, based on personal characteristics. A post hoc Tamhane's test indicated a significant difference ($p \leq .01$) between the groups who taught 1-2 service-learning courses ($M = 1.47$) and 3-5 courses ($M = 1.13$). This difference is noteworthy and may be attributed to the many obstacles faced in the start-up of teaching a service-learning course.

Although faculty members indicated a strong intention to continue using service-learning, the faculty were asked *what, if any, concerns might cause them not to continue to incorporate service-learning in their teaching, or to do so less frequently*. Respondents were asked to choose no more than three items from a list of nine potential deterrents. Space was provided to write potential deterrents not identified on the list. The nine potential deterrents were grouped into four categories: (1) time, logistics, and funding; (2) student and community outcomes; (3) reward structure; and (4) comfort with ability to effectively use service-learning.

Concerns related to time, logistics, and funding were selected most frequently (mean frequency = 64.0), followed by reward structure (mean frequency = 59.0), ability to effectively use service-learn-

Table 6
Potential Deterrents to Continuing Service-Learning (service-learning faculty)

Deterrent Categories	Mean Frequency
Time, logistics and funding	64.0
Reward structure	59.0
Ability to effectively use service-learning	39.5
Student and community outcomes	23.0

ing (mean frequency = 39.5), and concerns related to student and community outcomes (mean frequency = 23.0). The three strongest potential deterrents to continued use of service-learning from the list of nine (selected by at least 25% of the respondents) were "service-learning courses are time intensive and therefore difficult to balance with my other professional responsibilities" (40.7%), "I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning" (27.3%), and "I had difficulty securing funding for developing and/or implementing my service-learning course(s)" (25%) (see Tables 6 and 7).

A Pearson chi-square test was used to determine significant differences based on personal characteristics of human sciences faculty members for the three most frequently chosen potential deterrents for continued use of service-learning. The chi-squared analysis indicated that a significant difference existed among faculty in differing ranks ($p \leq .05$) and tenure status ($p \leq .05$) on the item "I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning." Crosstabulation analysis indicated that 30% of the assistant professors and 41% of the associate professors thought that they had not been rewarded in performance reviews and promotion decisions for using service-learning compared to only 23% of the faculty holding full professor rank. About one-third of the tenured faculty and those on tenure track (32%) indicated they had not been rewarded for implementing service-learning in their teaching (see Table 7). This result highlights the importance of recognizing faculty's efforts in coordinating and implementing service-learning.

Several respondents elaborated on potential deterrents in the open-ended section of the survey. Lack of peer and institutional support, time needed to establish service projects, and difficulty in evaluating service-learning experiences were the major barriers cited by service-learning faculty. One respondent commented on the reward structure, saying that "although I think it is somewhat rewarded in tenure and promotion decisions, it is absolutely not enough. In a points system, it is worth very little and so discourages me."

A noteworthy finding is that although lack of reward in implementing service-learning had been cited as a potential deterrent (Hesser, 1995), only one-fourth (27%) of the FCS service-learning faculty considered it as a demotivator. Lack of support in terms of funding, peer support, and concerns related to time and logistics were cited as greater impediments. Hammond (1994) found issues of time and task were factors making service-learning more difficult than traditional teaching methods. Abes et al. (2002) reported similar findings. Concerns regarding ability to effectively use service-learning were selected by almost 40% of the FCS faculty, a finding that may call for action. Perhaps more institutional resources need to be mobilized toward FCS faculty training and development for service-learning. Service-learning's pedagogical complexity, including adjusting to differing levels of student readiness and challenges associated with evaluation, calls for special attention across disciplines.

Table 7
Most Frequently Cited Potential Deterrents and Faculty Characteristics (service-learning faculty)

Potential Deterrents	% Responding	Significance Level
Service-learning courses are time intensive and therefore difficult to balance with my other professional responsibilities	40.7	NS
I have not been rewarded in my performance reviews and/or tenure and promotion decisions for my use of service-learning.	27.3	Rank* Tenure status*
I had difficulty securing funding for developing and/or implementing my service-learning course(s)	25.0	NS

Note. NS = Not Significant. * $p \leq .05$

Table 8
Clustered Deterrents for Service-Learning Use (non service-learning faculty)

Clustered Deterrent Categories	*M*
Time, logistics and funding concerns	2.91
Curricular and pedagogical concerns	2.44
Institutional and professional concerns	2.19
Student and community outcomes	1.64

Note. Scores based on 1 = Strongly Disagree and 5 = Strongly Agree

Due to increased emphasis in the literature on faculty reward structure as a deterrent, faculty members were asked a specific question: "*As you think about whether you will continue to incorporate service-learning into your teaching, how important is it that you be rewarded in your performance reviews and/or tenure and promotion decisions for doing so?*" Using a four-point Likert scale ranging from "not important" (1) to "very important" (4), the mean for all service-learning faculty was 2.4.

An analysis of variance (ANOVA) was performed to determine if there were any differences among faculty on the role of reward in continuing with service-learning based upon the eight personal characteristic traits. The results indicated that service-learning faculty were equally divided in their opinions about the role of reward in their decision to continue to use service-learning. A little over one-half (51%) thought reward was "not important" or "somewhat important" while 49% thought it was "important" or "very important." Although the literature commonly suggests that faculty members will respond to opportunities for service-learning if such activity is rewarded (Bess, 1982; Deci & Ryan, 1982; Levine, 1994; McKeachie, 1982), the data from FCS faculty do not support that finding. Not being rewarded was not cited as a major barrier in pursuing service-learning. This finding is inspiring and reflects FCS faculty's favorable disposition toward service-learning.

Deterrents for Non Service-learning Faculty

This section reports the results of a series of inquiries on the factors that deter non service-learning faculty from using service-learning. The Abes et al. (2002) instrument was used to gather information on research question 4: *What are the factors that deter human sciences faculty not using service-learning in their courses?* Of the non service-learning faculty ($n = 152$), 142 responded they had heard about service-learning prior to this survey while 6 respondents reported they had not. Among those who had heard about service-learning ($n = 142$), 20% ($n = 28$) responded that they had heard about service-learning but had not given thought as to whether or not to incorporate it into their teaching; while the remaining 80% ($n = 114$) responded that they had given it some thought. Results on deterrents for non service-learning faculty were analyzed for those 114 respondents.

On a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5), faculty were asked to *indicate for each of the 19 potential deterrents, the extent to which the factors contributed to their decision to not use service-learning.* Space was provided to write deterrents not on the list. The listed deterrents were grouped into four categories (see Table 8): time, logistics and funding concerns ($M = 2.91$); curricular and pedagogical concerns ($M = 2.44$); institutional and professional concerns ($M = 2.19$); and student and community outcomes ($M = 1.64$). The findings were similar to the Abes et al. (2002) study confirming that issues related to funding and logistical support were of paramount importance with curricular and pedagogical concerns coming a distant second.

The six specific items that most strongly deterred faculty from using service-learning (mean greater than 2.75) were "service-learning courses are time intensive and would be difficult to balance with my other professional responsibilities" ($M = 3.00$), "it is not relevant to the courses I teach" ($M = 2.96$), "I anticipate having logistical problems coordinating the community service aspect of the course" ($M = 2.92$), "I anticipate having (or have had) difficulty securing funding for service-learning" ($M = 2.87$), "I have not been given and/or do not anticipate being given release time to develop a service-learning course" ($M = 2.86$), and "it is unlikely that I will be rewarded in my performance review and/or tenure and promotion decisions for doing so" ($M = 2.78$) (see Table 9).

Space was provided to cite additional deterrents in the open-ended section of the survey. Some of the responses mirrored the opinions of service-learning faculty. Time and logistical issues were mentioned most frequently. A sizeable number of respondents mentioned they were unable to implement service-learning due to large class size. Several respondents thought lack of support in terms of personnel would make service-learning classes extremely difficult to establish and manage. New and part-time faculty

Table 9
Most Frequently Cited Specific Reasons for Not Incorporating Service-Learning (non service-learning faculty)

Reasons	*M*
I do not use service-learning because service-learning courses are time intensive and would be difficult to balance with my other professional responsibilities	3.00
I do not use service-learning because it is not relevant to the courses I teach	2.96
I do not use service-learning because I anticipate having logistical problems coordinating the community service aspect of the course	2.92
I do not use service-learning because I anticipate having (or have had) difficulty securing funding for service-learning	2.87
I do not use service-learning because I have not been given and/or do not anticipate being given release time to develop a service-learning course	2.86
I do not use service-learning because it is unlikely that I will be rewarded in my performance review and/or tenure and promotion decisions for doing so	2.78

Note. Scores based on 1 = Strongly Disagree and 5 = Strongly Agree

members indicated they had not received release time to develop a service-learning course. Quite a few faculty members mentioned it was difficult to take time out, due to other responsibilities, such as research and advising, in addition to teaching. One survey participant said "unfortunately service-learning efforts are not accounted for in tenure decisions. Need to take care of that before anything else." Lack of relevance to course materials and content area were other reasons mentioned for not using service-learning. Difficulty in establishing community partners was another major deterrent cited by non service-learning faculty. One faculty member said, "I have never found an agency or group willing to provide the effort needed to initiate student experience effectively." Locating enough service-learning sites to accommodate an entire class and enabling them to have meaningful experiences for small and not too large communities was cited as another deterrent. Difficulty in finding suitable placements and placement saturation in smaller communities and college towns were mentioned repeatedly in the open-end section of the survey. Absence of clear risk management principles to protect the students, faculty, and the institution was also cited. Evaluation deterred other faculty members from implementing service-learning. A few respondents mentioned their lack of knowledge for developing a service-learning course as a deterrent. Specifically, a respondent noted "when obtaining my education, I was not exposed to service-learning, so do not have enough experience with it to add it to the courses I teach."

All non service-learning faculty (n = 142), whether or not they had given thought about incorporating service-learning in their teaching, were asked *the likelihood that they would incorporate service-learning in their teaching*. Using a five-point Likert scale "very unlikely" (1) to "very likely" (5), the mean was 2.64. A quarter (24%) of the faculty were "likely" or "very likely" to use service-learning, while another 43% were "very unlikely" or "unlikely" to use service-learning. The remaining 33% were unsure regarding incorporating service-learning in their teaching. The results were analyzed by the eight faculty characteristics. The non service-learning faculty most likely to implement service-learning (mean greater than or equal to 3.00) were those in human development and food science and human nutrition (M = 3.01), assistant professors (M = 2.98), faculty teaching 6-10 years (M = 2.96), and of age 31-40 years (M = 3.00). The categories of faculty most unlikely to use service-learning (mean smaller or equal to 2.00) were in the teaching content area apparel, textiles, and fashion merchandising (M = 2.14) followed by those in food production and services (M = 2.25). An ANOVA indicated no significant difference for any other faculty characteristics.

To supplement the data regarding likelihood of non service-learning faculty (n = 142) using service-learning in the future, irrespective of whether they had given any thought about it or not, faculty were asked to answer an open-ended question on what might increase the likelihood that they would incorporate service-learning into their teaching. Responses were similar to those already mentioned by other faculty members. For a large majority of the survey respondents, increased release time, reduction in current workload, reduction in class sizes, relevance to course content, opportunity for developing new courses, and risk management guidelines would greatly increase the likelihood of incorporating service-learning in their teaching. Availability of suitable community sites, community offers on projects, and funding were cited frequently by most faculty members for deterring a service-learning component in courses. Numerous respondents indicated that active encouragement from a college dean or department chairperson, direct initiative from mid-level management, and a

formal college or university requirement for service-learning courses would increase the likelihood of incorporating this teaching strategy in their courses. Infrastructure support to manage complex logistical issues, staff support in terms of teaching assistance, funding support to develop courses, support in developing community connection, addition of credit hours to existing courses, and changes in departmental policies and practices related to course content were other reasons cited. Reassigning time/faculty workload credit to supervise the service-learning experience, receiving additional teaching-load units to compensate extra time and efforts, and recognizing service-learning efforts in evaluation and tenure might increase the likelihood of implementation. Many faculty members mentioned that in-house instruction in the form of workshops on the campus, illustration of service-learning activities/projects, training on how to fund and implement a service-learning component into established course curriculum, and information on how service-learning can meet specific learning competencies might encourage them in their decision to use service-learning.

Limitations

The design of the study was survey research using a self-report questionnaire, and thus was subject to the weaknesses related to self-reports. Although a definition of service-learning was provided in the instrument, all respondents may not have interpreted the definition in the same way. Therefore, some respondents who were considered service-learning faculty might not have actually used service-learning as defined. Instead, they might have included in their courses student teaching, internships, and clinical experiences. While similar to most Web surveys, the response rate of 26.1% may have provided an overestimate of scores when generalized to the total population of FCS/human sciences faculty members. Finally, the goal of the human sciences to promote and build an empowered citizenry may have skewed the faculty perceptions toward service-learning.

Future Research Directions

This research study should prove valuable to faculty and administrators in the human sciences fields. It also portends many other possible research studies that would be of interest to human sciences faculty and administrators, as well as service-learning investigators. Respondents in this study received the greatest encouragement from their department chairperson and college dean. This is no doubt a heartening revelation as administrative heads may be already aware of service-learning's beneficial outcomes and consequently interested faculty may have found a more nurturing environment to implement service-learning. Could this be a trend in the helping professions? A future study investigating attitudinal and perceptional differences about service-learning among human sciences/FCS or discipline-specific administrators such as deans, department chairs, and program coordinators would be valuable. More research is needed to identify specific student outcomes that faculty in individual disciplines deem important for implementing service-learning. Further investigation is also warranted to determine how service-learning can be utilized to fulfill subject matter competencies. Detailed deliberation on how service-learning can achieve explicit learning competencies may encourage skeptical faculty to experiment with service-learning while clear service and learning goals ensuring intellectual rigor may encourage faculty in general to try this pedagogy more frequently. Apart from student learning outcomes, service-learning faculty were also motivated by building university-community partnerships. Are faculty members in some disciplines more committed to building these partnerships? Is there a correlation between academic discipline and commitment toward service? Do faculty members in soft disciplines feel more inclined or obliged toward such partnership building? Are there facets of university-community relationships that inspire faculty to pursue service-learning? More investigation is needed to explore aspects of university-community relationships that inspire faculty to continue building this thread.

Final Thoughts

In the last decade, service-learning was identified as a strategic new direction for the human sciences/family and consumer sciences profession (Mitstifer & Miller, 1999). During the same time, scholars across disciplines were urged to identify how service-learning could enhance subject matter learning. This study is a small step in that direction. Lack of appropriate nurturance may inhibit the sustained growth of service-learning in the human sciences, a field favorably suited to reap service-learning benefits.

Bringle and Hatcher (1996) speculated that service-learning was most likely to flourish in disciplines with a predisposition toward an ethic and practice of service, such as with social work. The speculation proved to be true for the human sciences/FCS—60% of the faculty members in this study implemented service-learning in some form in their teaching. Twenty-five percent of the

remaining faculty were very likely to incorporate service-learning in their teaching. A content analysis of the potential reasons for non service-learning faculty not to have utilized service-learning reflected faculty willingness to consider this teaching strategy. Apart from issues related to time, logistics, and funding—which often had been mentioned as potential obstacles to service-learning in previous research—most faculty in this study were enthusiastic to try out this pedagogy if class sizes were small, if it was a requirement from the college or university, or so long as adequate instructions/resources were available to develop service-learning courses. Unlike faculty members in other fields, only one respondent was reluctant to use service-learning because he had not seen sufficient evidence that service-learning improved academic learning.

FCS faculty members were aware of service-learning's beneficial outcomes. Consequently, an overwhelming majority of respondents (93%) had either heard, thought, or incorporated service-learning in their teaching. The prospect of service-learning's prevalence and popularity within FCS appears to be promising. Beginning faculty members often have extra teaching loads coupled with publishing responsibilities to attain tenure. Adequate release time, opportunity to attend conferences, faculty development initiatives, and inspiration from colleagues could provide the extra support needed to use service-learning. Faculty in apparel, textiles, and fashion merchandising expressed service-learning's irrelevance to their teaching content. Publication of successful service-learning projects undertaken—both in apparel, textiles, and fashion merchandising, as well as other teaching content areas such as food service and production—will convince faculty of its relevance and importance. Previous research (Abes at al., 2002; Bringle et al., 1997; Hammond, 1994; McKay & Rozee, 2004) found student learning outcomes important in faculty's decision to use service-learning. Publication of successful service-learning activities coupled with empirical evidence in support of student learning outcomes in content-specific areas can help interested and circumspect faculty to at least consider service-learning. Successful models and research evidence, combined with effective documentation and appropriate marketing of prestigious grants and awards received for service-learning, may remove skepticism about this pedagogy. Driscoll (1998) reiterated the importance of a community office to serve as a liaison between community-university partnerships. Such establishments can help alleviate some of the concerns related to time, placement, and saturation issues. Without adequate logistical support, inciting faculty's interest in service-learning will continue to remain a challenge.

Faculty members in the human sciences/FCS did not seem to be too concerned with the role of reward in pursuing service-learning. Student outcomes, relevance to course content, release time, class size, and coordination were more important considerations for incorporating service-learning. Although assistant professors and instructors were the standout group to raise concerns about time and logistical issues, they were the ones most likely to incorporate service-learning. This paradox highlights the importance of encouragement, opportunity, and appropriate incentives to motivate faculty to use service-learning.

Service-learning has a definite place in the human sciences/family and consumer sciences curriculum as well as in other disciplines with an ethic of service, and should be encouraged in the training of students as it forms the link between academic learning and professional practice. Although service-learning's discipline-specific efficacy is yet to be fully established, its growth and prevalence in a broader range of subject areas have created opportunities to seek solutions to issues unique to particular fields of studies. Efforts to connect campuses with communities will remain unfulfilled without attention to this and other dilemmas that face institutions, faculty, and the service movement in general.

Note

The authors sincerely acknowledge the helpful comments and suggestions from the editor and his colleagues at the Michigan Journal of Community Service Learning. The authors are grateful to FCS/human sciences faculty members in institutions of higher education across the country who took time to respond to the survey. A special thank you to the pilot study group for their valuable feedback.

References

Abes, E. S., Jackson, G., & Jones, S. (2002). Factors that motivate and deter faculty use of service-learning. *Michigan Journal of Community Service Learning*, *9*(1), 5-17.

Astin, A. W. & Sax, L. J. (1998). How undergraduates are affected by service participation. *Journal of College Student Development*, *39*(3), 251-263.

Bess, J. (1982). The motivation to teach: Meanings, messages and morals. In J. Bess (Ed.), *Motivating professors to teach effectively* (pp. 99-107). San Francisco: Jossey-Bass.

Biglan, A. (1973a). The characteristics of subject matter in different academic areas. *Journal of Applied Psychology*, *57*(3), 195-203.

Biglan, A. (1973b). Relationships between subject matter characteristics and the structure and output of university departments. *Journal of Applied Psychology*, *57*(3), 204-213.

Bloomgarden, A. H., & O' Meara, K. A. (2007). Faculty role integration and community engagement. *Michigan Journal of Community Service Learning*, *13*(2), 5-18.

Bosnjak, M. & Tuten, T. L. (2001). Classifying response behaviors in web-based surveys. *Journal of Computer-Mediated Communication 6*(3). Retrieved July 17, 2005 from http://jcmc.indiana.edu/vol6/issue3/boznjak.html

Braxton, J.M. (1995) Disciplines with an affinity for the improvement of undergraduate education. In N. Hativa & M. Marincovich (Eds.), *Disciplinary differences in teaching and learning: Implications for practice*, 59-64. San Francisco: Jossey-Bass.

Braxton, J.M. & Hargens, L.L. (1996) Variation among academic disciplines: analytical frameworks and research. In J.C. Smart (Ed.), *Higher education handbook of theory and research*, XI, 1-46.

Bringle, R. G. & Hatcher, J. A. (1996). Implementing service-learning in higher education. *The Journal of Higher Education*, *67*, 221-239.

Bringle, R. G., Hatcher, J. A., & Games, R. (1997). Engaging and supporting faculty in service-learning. *Journal of Public Service and Outreach*, *3*(1), 45-51.

Cantor, J. A. (1995). *Experiential learning in higher education: Linking classroom and community*. (Report No. ASHE-RR-93002008). Washington, DC: Office of Educational Research and Improvement. (ERIC Document Reproduction Service No. HE029965).

Deci, E. & Ryan, R. (1982). Instrinsic motivation to teach: Possibilities and obstacles in our colleges and universities. In J. Bess (Ed.), *Motivating professors to teach effectively* (pp. 27-35). San Francisco: Jossey-Bass.

Driscoll, A. (1998). Comprehensive design of community service: New understanding, options, and vitality in student learning at Portland State University. In E. Zlotkowski (Ed.), *Successful service-learning programs: New models of excellence in higher education*. Bolton, MA: Anker.

Driscoll, A. (2000). Studying faculty and service-learning: Directions for inquiry and development. *Michigan Journal of Community Service Learning*, Special Issue, 35-41.

Eyler, J. & Giles, D. E., Jr. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.

Eyler, J., Giles, D. E., Jr., & Braxton, J. (1997). The impact of service-learning on college students. *Michigan Journal of Community Service Learning*, *4*, 5-15.

Eyler, J., Giles, D. E., Jr., & Schmiede, A. (1996). A *practitioner's guide to reflection in service-learning: Student voices and reflections*. Nashville, TN: Vanderbilt University.

Gay, L. R. (1996). Educational Research: Competencies for analysis and application (5th ed.). Englewood Cliffs, NJ: Prentice-Hall.

Giles, D. E. & Eyler, J. S. (1998). A service-learning research agenda for the next five years. In R. Rhoads & J. Howard (Eds.), *Academic service-learning: A pedagogy of action and reflection* (pp. 65-72). San Francisco: Jossey-Bass.

Hammond, C. (1994). Faculty motivation and satisfaction in Michigan higher education. *Michigan Journal of Community Service Learning*, *1*, 42-49.

Harwood, A. M., Ochs, L., Currier, D., Duke, S., Hammond, J., Moulds, L., Stout, K., Werder, C. (2005). Communities for growth: Cultivating and sustaining service-learning teaching and scholarship in a faculty fellows program. *Michigan Journal of Community Service Learning*, *12*(1), 41-51.

Hesser, G. (1995). Faculty assessment of student learning: Outcomes attributed to service-learning and evidence of changes in faculty attitude about experiential education. *Michigan Journal of Community Service Learning*, *2*, 33-42.

Levine, M. A. (1994). Seven steps to getting faculty involved in service-learning: how a traditional faculty member came to teach a course on "volunteerism, community, and citizenship. *Michigan Journal of Community Service Learning*, *1*, 110-114.

McKay, V. C. & Rozee, P. D. (2004). Characteristics of faculty who adopt community service learning pedagogy. *Michigan Journal of Community Service Learning*, *10*(2), 21-33.

McKeachie, W. (1982). The rewards of teaching. In J. Bess (Ed.), *Motivating professors to teach effectively* (pp. 7-13). San Francisco: Jossey-Bass.

Mitstifer, D. & Miller, J.R. (1999). *Strategic leadership of the profession: Agenda for change*. East Lansing, MI: Kappa Omicron Nu.

Neumann, R., Parry, S., & Becher, T. (2002) Teaching and learning in their disciplinary contexts. *Studies in Higher Education*, *27*(4), 405-417.

Patel, H. S. (2004). *Assessment of the personal and professional attributes of educators who utilize service-learning*. (Doctoral Dissertation, Iowa State University, 2004). Dissertation Abstracts International, DAI-A 65/07, p. 2479

Robertson L. J. & Bean, J. P. (1997, March). Women faculty in Family and Consumer Sciences: Influence on job satisfaction. *Family and Consumer Sciences Research Journal*, *27*(2), 167-191.

Stanton, T. K. (1994). The experience of faculty participants in an instructional development seminar on service-learning. *Michigan Journal of Community Service Learning*, *1*, 7-20.

Stanton, T. K., Giles, D. E., Jr., & Cruz, N. (1999). *Service-learning: A movement's pioneers reflect on its origins, practice, and future*. San Francisco: Jossey-Bass.

Sullivan, D. & Redick, S. S. (1991). Vocational home economics teacher educators: A profile. *Home Economics Research Journa*l, *19*(4), 315-323.

Weigert, S. M. (1998). *Academic service-learning: Its meaning and relevance. A pedagogy of action and reflection*. San Francisco: Jossey-Bass.

Zlotkowski, E. (2000, Fall). Service-learning in the disciplines. *Michigan Journal of Community Service Learning*, 61-67.

Authors

MADHUMITA BANERJEE is an assistant professor at St. Cloud State University. She received her Ph.D. in Family and Consumer Sciences Education and a Master's degree in Human Development and Family Studies from Iowa State University. She teaches courses in statistics, research methods, and human development.

CHERYL O. HAUSAFUS is associate professor and graduate coordinator of Family and Consumer Sciences Education at Iowa State University. Her current teaching and research focuses on assessment, program development, research methods, and service-learning.